



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/828,935A
Source: EFS/1FW10
Date Processed by STIC: 11-22-04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/828,93>1A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleic
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. **Do not use tab codes between numbers; use space characters**, instead.
- 4 Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped
- Please also adjust the "(ii) NUMBER OF SEQUENCES." response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



Does Not Comply
Corrected Diskette Needed

IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/828,935A

DATE: 11/22/2004
TIME: 08:19:32

Input Set : N:\efs\10828935A\UTMB1024rev_ST25.txt
Output Set: N:\CRF4\11222004\J828935A.raw

3 <110> APPLICANT: Board of Regents, The University of Texas System
4 Gorenstein, David G.
5 Luxon, Bruce A.
6 Herzog, Norbert
7 Tang, Xian B.
9 <120> TITLE OF INVENTION: BEAD BOUND COMBINATORIAL OLIGONUCLEOSIDE PHOSPHOROTHIOATE

AND

10 PHOSPHORODITHIOATE APTAMER LIBRARIES
12 <130> FILE REFERENCE: UTMB:1024
14 <140> CURRENT APPLICATION NUMBER: US 10/828,935A
15 <141> CURRENT FILING DATE: 2004-04-21
17 <150> PRIOR APPLICATION NUMBER: US 10/272,509
18 <151> PRIOR FILING DATE: 2002-10-16
20 <150> PRIOR APPLICATION NUMBER: US 60/272,509
21 <151> PRIOR FILING DATE: 2001-11-15
23 <160> NUMBER OF SEQ ID NOS: 70
25 <170> SOFTWARE: PatentIn version 3.3
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 15
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Synthetic oligonucleotide.

The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

36 <220> FEATURE:
37 <221> NAME/KEY: misc_feature Remove
38 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic oligonucleotide
40 <400> SEQUENCE: 1

15

41 ggatccggtg gtctg
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 15
46 <212> TYPE: DNA
47 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Synthetic oligonucleotide.

53 <220> FEATURE:
54 <221> NAME/KEY: misc_feature Remove
55 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic oligonucleotide
57 <400> SEQUENCE: 2

15

58 cctactcgcg aattc
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 23
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
66 <220> FEATURE:

Please explain source of
genetic material in feature <220>, <223>
see Item # 11 on Error Summary SHEET,

RAW SEQUENCE LISTING

DATE: 11/22/2004

PATENT APPLICATION: US/10/828,935A

TIME: 11/22/2008

Input Set : N:\efs\10828935A\UTMB1024rev_ST25.txt
Output Set: N:\CBF4\11222004\J828935A_raw

67 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
68 dithiophosphate
71 <220> FEATURE:
72 <221> NAME/KEY: modified_base
73 <222> LOCATION: (1)..(23)
74 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
75 dithiophosphate at positions 1, 3, 5, 7, 9, 11, 13, 15, 17, 19,
76 21, 23.
78 <400> SEQUENCE: 3
79 cagttgaggg gactttccca ggc 23
82 <210> SEQ ID NO: 4
83 <211> LENGTH: 23
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Synthetic oligonucleotide.
91 <220> FEATURE:
92 <221> NAME/KEY: modified_base
93 <222> LOCATION: (1)..(23)
94 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
95 dithiophosphate at positions 1, 3, 5, 7, 9, 11, 13, 15, 17, 19,
96 21, 23.
98 <400> SEQUENCE: 4 23
99 cctgcacatc tcaggatgac ttt
102 <210> SEQ ID NO: 5
103 <211> LENGTH: 22
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Synthetic oligonucleotide.
111 <220> FEATURE:
112 <221> NAME/KEY: modified_base
113 <222> LOCATION: (1)..(22)
114 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
115 dithiophosphate at positions 4, 8, 9, 16, 19.
117 <400> SEQUENCE: 5
118 atgttagccag ctatgtctgtc ag 22
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 22
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Synthetic oligonucleotide.
130 <220> FEATURE:
131 <221> NAME/KEY: modified_base
132 <222> LOCATION: (1)..(22)
133 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
or
134 dithiophosphate at positions 5, 9, 10, 16, 19.

136 <400> SEQUENCE: 6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/828, 935A

DATE: 11/22/2004

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Input Set : N:\efs\10828935A\UTMB1024rev_ST25.txt
 Output Set: N:\CRF4\11222004\J828935A.raw

137 cgccccagtga aggttggacc cc 22
 140 <210> SEQ ID NO: 7
 141 <211> LENGTH: 50
 142 <212> TYPE: DNA
 143 <213> ORGANISM: Artificial Sequence
 145 <220> FEATURE:
 146 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 149 <220> FEATURE:
 150 <221> NAME/KEY: misc_feature *remove*
 151 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 153 <400> SEQUENCE: 7
 154 atgcctactc gcgaattccc aggagattcc acggatccgg tggctgttc 50
 157 <210> SEQ ID NO: 8
 158 <211> LENGTH: 52
 159 <212> TYPE: DNA
 160 <213> ORGANISM: Artificial Sequence
 162 <220> FEATURE:
 163 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 166 <220> FEATURE:
 167 <221> NAME/KEY: misc_feature *remove*
 168 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 170 <400> SEQUENCE: 8
 171 cctactcgcg aattcaggatgg aggggacttt cccaggcgga tccgggtggtc tg 52
 174 <210> SEQ ID NO: 9
 175 <211> LENGTH: 18
 176 <212> TYPE: DNA
 177 <213> ORGANISM: Artificial Sequence
 179 <220> FEATURE:
 180 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 183 <220> FEATURE:
 184 <221> NAME/KEY: misc_feature *remove*
 185 <223> OTHER INFORMATION: Description of Artificial Sequence: consensus sequence
 187 <400> SEQUENCE: 9
 188 atgcctactc gcgaattc 18
 191 <210> SEQ ID NO: 10
 192 <211> LENGTH: 18
 193 <212> TYPE: DNA
 194 <213> ORGANISM: Artificial Sequence
 196 <220> FEATURE:
 197 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 200 <220> FEATURE:
 201 <221> NAME/KEY: misc_feature *remove*
 202 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 204 <400> SEQUENCE: 10
 205 gaacagagacca cccggatcc 18
 208 <210> SEQ ID NO: 11
 209 <211> LENGTH: 22
 210 <212> TYPE: DNA
 211 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/828,935A

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Input Set : N:\efs\10828935A\UTMB1024rev_ST25.txt
 Output Set: N:\CRF4\11222004\J828935A.raw

213 <220> FEATURE:
 214 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 217 <220> FEATURE:
 218 <221> NAME/KEY: misc_feature *remove*
 219 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 221 <400> SEQUENCE: 11
 222 ctgtgagtcg actgatgacg gt 22
 225 <210> SEQ ID NO: 12
 226 <211> LENGTH: 22
 227 <212> TYPE: DNA
 228 <213> ORGANISM: Artificial Sequence
 230 <220> FEATURE:
 231 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 234 <220> FEATURE:
 235 <221> NAME/KEY: misc_feature *remove*
 236 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 238 <400> SEQUENCE: 12
 239 agttgagtcg aaggaccat tt 22
 242 <210> SEQ ID NO: 13
 243 <211> LENGTH: 22
 244 <212> TYPE: DNA
 245 <213> ORGANISM: Artificial Sequence
 247 <220> FEATURE:
 248 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 251 <220> FEATURE:
 252 <221> NAME/KEY: misc_feature *remove*
 253 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 255 <400> SEQUENCE: 13
 256 cgtcaagtct cagtcccat tt 22
 259 <210> SEQ ID NO: 14
 260 <211> LENGTH: 22
 261 <212> TYPE: DNA
 262 <213> ORGANISM: Artificial Sequence
 264 <220> FEATURE:
 265 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 268 <220> FEATURE:
 269 <221> NAME/KEY: misc_feature *remove*
 270 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
oligonucleotide
 272 <400> SEQUENCE: 14
 273 agtcaagtct aagtccacg gt 22
 276 <210> SEQ ID NO: 15
 277 <211> LENGTH: 22
 278 <212> TYPE: DNA
 279 <213> ORGANISM: Artificial Sequence
 281 <220> FEATURE:
 282 <223> OTHER INFORMATION: Synthetic oligonucleotide.
 285 <220> FEATURE:
 286 <221> NAME/KEY: modified_base
 287 <222> LOCATION: (1)..(22)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/828,935A

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Input Set : N:\efs\10828935A\UTMB1024rev_ST25.txt
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288 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate
 or

289 dithiophosphate at positions 2, 8, 14, 16, 22.

291 <400> SEQUENCE: 15

292 ctgtgagtcg actgatgacg gt

22

295 <210> SEQ ID NO: 16

296 <211> LENGTH: 22

297 <212> TYPE: DNA

298 <213> ORGANISM: Artificial Sequence

300 <220> FEATURE:

301 <223> OTHER INFORMATION: Synthetic oligonucleotide.

304 <220> FEATURE:

305 <221> NAME/KEY: modified_base

306 <222> LOCATION: (1)..(22)

307 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate

or

308 dithiophosphate at positions 8, 12, 14, 20, 22.

310 <400> SEQUENCE: 16

22

311 agttgagtcg aaggacccat tt

314 <210> SEQ ID NO: 17

315 <211> LENGTH: 22

316 <212> TYPE: DNA

317 <213> ORGANISM: Artificial

319 <220> FEATURE:

320 <223> OTHER INFORMATION: Synthetic oligonucleotide.

323 <220> FEATURE:

324 <221> NAME/KEY: modified_base

325 <222> LOCATION: (1)..(22)

326 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate

or

327 dithiophosphate at positions 4, 8, 10, 12, 20, 22.

329 <400> SEQUENCE: 17

22

330 cgtcaagtct cagtcccat tt

333 <210> SEQ ID NO: 18

334 <211> LENGTH: 22

335 <212> TYPE: DNA

336 <213> ORGANISM: Artificial Sequence

338 <220> FEATURE:

339 <223> OTHER INFORMATION: Synthetic oligonucleotide.

342 <220> FEATURE:

343 <221> NAME/KEY: modified_base

344 <222> LOCATION: (1)..(22)

345 <223> OTHER INFORMATION: wherein at least one nucleotide is an achiral thiophosphate

or

346 dithiophosphate at positions 4, 8, 12, 18, 22.

348 <400> SEQUENCE: 18

22

349 agtcaagtct aagtccacg gt

352 <210> SEQ ID NO: 19

353 <211> LENGTH: 22

354 <212> TYPE: DNA

355 <213> ORGANISM: Artificial Sequence

357 <220> FEATURE:

358 <223> OTHER INFORMATION: Artificial oligonucleotide. *remove - Artificial oligonucleotide - Keeps - feature below in Sequence listing - saying "Synthetic oligonucleotide"*

RAW SEQUENCE LISTING ERROR SUMMARY
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:17 — this is OK

VERIFICATION SUMMARY

PATENT APPLICATION: **US/10/828,935A**

DATE: 11/22/2004

TIME: 08:19:33

Input Set : **N:\efs\10828935A\UTMB1024rev_ST25.txt**
Output Set: **N:\CRF4\11222004\J828935A.raw**